

# TECHNICAL DATA SHEET



## GENERAL DESCRIPTION

Fordia's OWL fishing tool, is an efficient water fishing tool, designed to assure positive internal engagement of the fish, to retrieve broken drill strings from a diamond drill hole. It is designed for sizes B, N, H, and P, wireline drill rods. The simple, rugged design allows it to be released if the fish cannot be pulled.

## CONSTRUCTION

The Fordia OWL fishing tool consists of a 2 piece body containing 3 expansion lock wedges, attached to a plunger, supported by a compression spring below. Each of the lock wedges is held in place by a scrub screw, threaded into the body of the plunger. The size and type of the upper box connection can be supplied according to customer specification, right or left handed threads.

*OWL Fishing Tool | Bottom part*

*OWL Fishing Tool | Head part*



## ASSEMBLY

The body of the fishing tool threads apart, separating the tool in two and exposing the plunger, 3 lock wedges and the compression spring. Each lock wedge is held in place by a scrub screw. The scrub screws should be threaded evenly into the plunger, so that they do not protrude beyond the tops of the lock wedges. The plunger and lock wedges should travel smoothly the full length of the channels. Ensure the tool is clean and lubricated. The spring is inserted into the head part before re-assembly.

## ***OPERATION***

Examine the tool for any damage and ensure all parts move freely, and that it is the correct size for the rods being fished. A test should be done on surface to ensure proper fit.

The hole should be flushed clean of all drilling muds and debris before lowering the fishing tool.

Connect the tool to the fishing string using a 6 m rod of the same diameter as the tool. The pressure of water on the internal plunger of the tool forces the attached lock wedges down and outwards on the taper of the tool body to positively engage the fish.

## ***ENGAGING THE FISH***

Ensure that the top of the fish is known to the inch.

Lower the OWL fishing tool to within 12" of the fish. Note the rod weight on the gage.

Lower the fishing string slowly into the fish, by means of the hydraulic feed. The driller should never push the tool so far into the fish as to bottom out on the adaptor to the fishing string. This will eliminate the possibility of releasing the fishing tool from the fish.

Fill the fishing string with water, and pump 150 psi water pressure onto the tool.

Pull back the rod string using the feed cylinder, and read the rod weight gage to determine whether or not you have engaged the fish. An increase in rod weight on the gage indicates that the tool is engaged within the fish. The water pressure can now be released, and the weight of the fish will keep the 3 lock wedges engaged. The rods can now be removed from the hole, using a slow steady retrieval. There should be no downward movement of the drill string during this operation as this can release the tool.

## ***RELEASING THE FISH***

To release the fish, the water pressure must be turned off completely, and the water swivel removed from the drill string. The driller must allow enough time for the water to completely drain out of the rod string through the holes in the head part of the OWL fishing tool. Once drained, all internal pressure is removed from the plunger. The rod string is then lowered a few inches to retract the 3 lock wedges. Slowly pull the rods from the hole.

## ***MAINTENANCE***

After each use, the fishing OWL tool should be disassembled, cleaned and inspected for damage or signs of wear, and lubricated. Proper maintenance of the tool will ensure good performance and extend the life of the tool.